

# Technical Bulletin

Genes that fit *your* farm.

**SeCan**

Canada's Seed Partner

## AB Advantage 6-Row Feed & Forage Barley



Progress Through Research  
Le progrès grâce à la recherche

### Description:

**AB Advantage** is a dual purpose smooth awned 6-row barley with excellent grain and forage yield potential. **AB Advantage** is a full height 6-row that stands very well and has large plump kernels. With a smooth awn, and high biomass **AB Advantage** is well suited to forage/silage/ feed for western Canada.

**Parentage:** H97098003/Sundre

### Strengths:

- Grain yield 105% of Vivar and 102% of CDC Austenson in registration cooperative trials
- Forage yield 102% of Vivar and CDC Austenson in forage barely registration trials
- **Smooth awned**
- High % plump and heavy TKW and bushel weight compared to Vivar and AC Ranger
- Better lodging tolerance than AC Ranger and slightly weaker than Vivar in registration trials

### Neutral Traits:

- Full height - +18cm compared to Vivar
- Intermediate resistance to surface-borne smuts, loose smut, stem rust, scald, spot blotch and spotted form net blotch
- Medium-Late maturity, +2 days later than Vivar
- Forage quality similar to the checks Vivar and AC Ranger

### Weaknesses:

- Moderately susceptible to netted net blotch
- Susceptible to FHB

### Breeder:

Dr. Joseph Nyachiro  
Field Crop Development Centre  
Alberta Agriculture and Rural Development  
Lacombe, Alberta

**PBR 91 Protected**

### 2016 and 2017 Western Cooperative Six-Row Barley Registration Trials

| Variety             | Grain Yield<br>% AC Ranger | Heading<br>(days) | Maturity<br>(days) | Height<br>(cm) | Lodging<br>1 = erect<br>9 = flat | 1000<br>Kernel<br>Weight<br>(gm) | Test<br>Weight<br>(g/hl) | %<br>Plump  |
|---------------------|----------------------------|-------------------|--------------------|----------------|----------------------------------|----------------------------------|--------------------------|-------------|
| AC Ranger           | 100                        | 56.3              | 91.8               | 85.5           | 5.2                              | 40.3                             | 61.0                     | 79.7        |
| Vivar               | 101                        | 56.9              | 90.5               | 79.8           | 3.4                              | 40.8                             | 61.1                     | 83.3        |
| CDC Mayfair         | 94                         | 54.9              | 89.6               | 84.8           | 4.3                              | 38.5                             | 61.1                     | 89.9        |
| Celebration         | 97                         | 54.6              | 88.2               | 86.0           | 4.1                              | 36.7                             | 62.9                     | 88.0        |
| <b>AB Advantage</b> | <b>106</b>                 | <b>57.4</b>       | <b>92.4</b>        | <b>97.8</b>    | <b>3.6</b>                       | <b>45.0</b>                      | <b>62.5</b>              | <b>89.8</b> |

### 2016 and 2017 Western Cooperative Forage Barley Registration Trials

| Variety             | Forage Yield<br>% AC Ranger | Height<br>(cm) | Lodging<br>1 = erect<br>9 = flat | Crude<br>Protein<br>% | NDF<br>%    | ADF<br>%    | IVTD<br>%   | Starch<br>% | CC<br>(cow<br>d/ha) | ADG<br>(kg/d) | NDF<br>30-NDF |
|---------------------|-----------------------------|----------------|----------------------------------|-----------------------|-------------|-------------|-------------|-------------|---------------------|---------------|---------------|
| AC Ranger           | 100                         | 83.6           | 2.3                              | 9.3                   | 44.5        | 28.5        | 75.5        | 25.0        | 695                 | 0.90          | 44.7          |
| CDC Austenson       | 104                         | 81.9           | 1.6                              | 8.8                   | 44.3        | 27.9        | 75.6        | 24.2        | 724                 | 0.93          | 44.6          |
| CDC Cowboy          | 107                         | 103.7          | 2.2                              | 8.4                   | 46.4        | 30.0        | 73.4        | 23.2        | 753                 | 0.75          | 42.3          |
| Vivar               | 104                         | 79.6           | 1.5                              | 8.6                   | 44.2        | 29.0        | 75.6        | 27.1        | 724                 | 0.90          | 44.8          |
| <b>AB Advantage</b> | <b>107</b>                  | <b>96.3</b>    | <b>1.9</b>                       | <b>8.9</b>            | <b>45.3</b> | <b>28.7</b> | <b>73.7</b> | <b>23.3</b> | <b>747</b>          | <b>0.86</b>   | <b>41.6</b>   |

NDF = neutral detergent fibre, ADF = acid detergent fibre, IVTD = in-vitro true digestibility, CC = carrying capacity, ADG = average daily gain

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## Seed Manitoba 2026 - Barley Comparison

| Variety                    | Site Years Tested | Yield bu/ac | Protein %   | Relative Maturity +/- 88 days | Height +/- 89cm | Test Weight +/- 48.7lb/bu | Awns Rough or Smooth | Resistance Level: |            |                    |            |                   |                    |             |           |          |
|----------------------------|-------------------|-------------|-------------|-------------------------------|-----------------|---------------------------|----------------------|-------------------|------------|--------------------|------------|-------------------|--------------------|-------------|-----------|----------|
|                            |                   |             |             |                               |                 |                           |                      | Lodging           | Loose Smut | Surface Borne Smut | Root Rot   | Netted Net Blotch | Spotted Net Blotch | Spot Blotch | Stem Rust | FHB      |
| AAC Stockton (2R)          | 31                | 118         | 12.3        | +1                            | -2              | 0                         | R                    | G                 | R          | R                  | ---        | I                 | I                  | I           | R         | MR       |
| CDC Austenson (2R)         | 105               | 116         | 12.2        | +1                            | 0               | +0.5                      | R                    | G                 | S          | R                  | I          | MS                | R                  | MR          | I         | I        |
| CDC Churchill (2R)*        | 46                | 114         | 12.3        | +1                            | -5              | -0.2                      | R                    | G                 | MS         | MR                 | ---        | MR                | MR                 | I           | MR        | MS       |
| CDC Durango (2R)           | 29                | 114         | 12.4        | +2                            | -3              | +0.1                      | R                    | VG                | S          | R                  | ---        | MR                | MS                 | I           | I         | I        |
| CDC Renegade (2R)          | 29                | 107         | 12.6        | +1                            | +7              | -0.3                      | S                    | F                 | I          | MR                 | ---        | MS                | MR                 | MS          | MR        | MR       |
| Esma (2R) <b>VUA</b>       | 30                | 115         | 12.1        | +1                            | -10             | -0.4                      | ---                  | G                 | R          | NT                 | ---        | MS                | MS                 | MS          | NT        | I        |
| KWS Kellie (2R) <b>VUA</b> | 29                | 107         | 12.0        | 1                             | -11             | -1.5                      | ---                  | P                 | R          | NT                 | ---        | MS                | MS                 | MS          | NT        | I        |
| <b>AB Advantage (6R)</b>   | <b>30</b>         | <b>109</b>  | <b>13.2</b> | <b>+1</b>                     | <b>+15</b>      | <b>0</b>                  | <b>S</b>             | <b>VG</b>         | <b>MR</b>  | <b>I</b>           | <b>---</b> | <b>MS</b>         | <b>I</b>           | <b>I</b>    | <b>I</b>  | <b>S</b> |

Lodging Ratings: F=Fair; G=Good; VG=Very Good Disease Ratings: R=Resistant; MR=Moderately Resistant; I=Intermediate; MS=Moderately Susceptible; S=Susceptible, NT = Not tested

## 2026 Saskatchewan Varieties of Grain - Barley Comparison

| Variety               | Years Tested | # Rows   | Awn Type | Yield (% of AAC Synergy) |            | Relative Maturity | Height (cm) | -----Resistance to----- |                   |                    |             |          |            |             |            |           |          |
|-----------------------|--------------|----------|----------|--------------------------|------------|-------------------|-------------|-------------------------|-------------------|--------------------|-------------|----------|------------|-------------|------------|-----------|----------|
|                       |              |          |          | Area 1 & 2               | Area 3 & 4 |                   |             | Lodging                 | Netted Net Blotch | Spotted Net Blotch | Spot Blotch | Scald    | Loose Smut | Other Smuts | Root Rot   | Stem Rust | FHB      |
| AAC Synergy           | 7            | 2        | R        | 100                      | 100        | M                 | 76          | F                       | MR                | R                  | R           | S        | S          | I           | I          | MR        | I        |
| AAC Stockton          | 5            | 2        | R        | 102                      | 102        | M                 | 74          | F                       | I                 | I                  | I           | S        | R          | R           | ---        | R         | MR       |
| AB Tofield            | 7            | 6        | S        | 102                      | 103        | L                 | 82          | G                       | MS                | I                  | I           | I        | ---        | MR          | ---        | R         | S        |
| CDC Austenson         | 7            | 2        | R        | 102                      | 103        | M                 | 76          | G                       | MS                | R                  | MR          | S        | S          | R           | I          | I         | I        |
| CDC Churchill*        | 7            | 2        | R        | 105                      | 104        | M                 | 71          | G                       | MR                | MR                 | I           | S        | MS         | MR          | ---        | MR        | MS       |
| CDC Durango           | 7            | 2        | R        | 105                      | 107        | M                 | 75          | VG                      | MR                | MS                 | I           | MS       | S          | MR          | ---        | I         | I        |
| CDC Renegade          | 5            | 2        | S        | 103                      | 96         | M                 | 92          | F                       | I                 | MR                 | MS          | S        | MS         | MR          | ---        | MR        | MR       |
| Esma <b>VUA</b>       | 5            | 2        | R        | 103                      | 98         | M                 | 64          | G                       | MS                | MS                 | MS          | S        | R          | ---         | ---        | ---       | I        |
| KWS Kellie <b>VUA</b> | 5            | 2        | R        | 102                      | 96         | L                 | 62          | G                       | MS                | MS                 | MS          | I        | R          | ---         | ---        | ---       | I        |
| <b>AB Advantage</b>   | <b>7</b>     | <b>6</b> | <b>S</b> | <b>103</b>               | <b>100</b> | <b>VL</b>         | <b>92</b>   | <b>VG</b>               | <b>MS</b>         | <b>I</b>           | <b>I</b>    | <b>I</b> | <b>MR</b>  | <b>I</b>    | <b>---</b> | <b>I</b>  | <b>S</b> |

M=Medium; L=Late; F=Fair; G=Good; VG=Very Good; P=Poor; VP=Very Poor Disease Ratings: R=Resistant; MR=Moderately Resistant; I=Intermediate; MS=Moderately Susceptible; S=Susceptible

## 2026 Alberta Seed Guide – Feed and Food Barley Comparison

| Variety             | 2 or 6 Row | Awn Type | Most Recent Year of Testing | Station Years | Yield % AAC Synergy |                  |                   | Maturity Days +/- AAC Synergy | Test Weight lb/bu | TKW (g) | Height (cm) | Resistance to Lodging | Disease Tolerance |             |       |                      |                     |             |     |
|---------------------|------------|----------|-----------------------------|---------------|---------------------|------------------|-------------------|-------------------------------|-------------------|---------|-------------|-----------------------|-------------------|-------------|-------|----------------------|---------------------|-------------|-----|
|                     |            |          |                             |               | Overall Yield       | Low <113 (bu/ac) | High >113 (bu/ac) |                               |                   |         |             |                       | Loose Smut        | Other Smuts | Scald | Spot Form Net blotch | Net Form Net Blotch | Spot Blotch | FHB |
|                     |            |          |                             |               |                     |                  |                   |                               |                   |         |             |                       |                   |             |       |                      |                     |             |     |
| AAC Synergy (bu/ac) |            |          |                             |               | 124                 | 85               | 149               |                               |                   |         |             |                       |                   |             |       |                      |                     |             |     |
| AAC Synergy         | 2          | R        | 2025                        | 177           | 100                 | 100              | 100               | 93                            | 53                | 49      | 81          | F                     | S                 | I           | S     | R                    | MR                  | R           | I   |
| AAC Stockton        | 2          | R        | 2025                        | 44            | 103                 | 102              | 103               | 0                             | 53                | 50      | 80          | F                     | R                 | R           | S     | I                    | I                   | I           | MR  |
| AB Tofield          | 6          | S        | 2021                        | 24            | 104                 | 101              | 106               | +1                            | 52                | 43      | 84          | G                     | MR                | MR          | I     | I                    | MS                  | I           | S   |
| CDC Austenson       | 2          | R        | 2025                        | 156           | 101                 | 98               | 103               | +2                            | 54                | 49      | 81          | G                     | S                 | R           | S     | R                    | MS                  | R           | I   |
| CDC Churchill*      | 2          | R        | 2024                        | 57            | 104                 | 102              | 104               | +2                            | 53                | 46      | 77          | G                     | MS                | MR          | S     | MR                   | MR                  | I           | MS  |
| CDC Durango         | 2          | R        | 2023                        | 45            | 107                 | 101              | 110               | +2                            | 54                | 50      | 79          | VG                    | S                 | R           | MS    | MS                   | MR                  | I           | I   |
| CDC Renegade        | 2          | S        | 2022                        | 26            | 102                 | 109              | 97                | +4                            | 52                | 52      | 90          | F                     | I                 | MR          | S     | MR                   | I                   | MS          | MR  |
| Esma VUA            | 2          | R        | 2022                        | 26            | 110                 | 114              | 107               | +3                            | 52                | 51      | 69          | VG                    | R                 | XX          | S     | MS                   | MS                  | MS          | I   |
| KWS Kellie VUA      | 2          | R        | 2022                        | 26            | 114                 | 121              | 110               | +5                            | 52                | 50      | 66          | VG                    | R                 | XX          | I     | MS                   | MS                  | MS          | I   |
| AB Advantage        | 6          | S        | 2020                        | 32            | 103                 | 99               | 104               | +2                            | 52                | 48      | 102         | G                     | MR                | I           | I     | I                    | MS                  | I           | S   |

R=Rough; VG=Very Good, G=Good, F=Fair; P=Poor; VP=Very Poor; Disease Ratings: R=Resistant; MR=Moderately Resistant; I=Intermediate; MS=Moderately Susceptible; S=Susceptible, NT = Not tested

\*Malting barley for comparison

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